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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|--------------------------|----------------------|---------------------|------------------|
| 10/722,357 | 11/24/2003 | Michela Gallagher | JHUC-0008-101 | 4705 |
| 1473 ROPES & GRA | 7590 05/25/201 XY LLP | EXAMINER | | |
| PATENT DOC | KETING 39/361 | | PURDY, KYLE A | |
| 1211 AVENUE OF THE AMERICAS NEW YORK, NY 10036-8704 | | | ART UNIT | PAPER NUMBER |
| | | | 1611 | |
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| | | | 05/25/2010 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | |
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| | 10/722,357 | GALLAGHER ET AL. | | |
| Office Action Summary | Examiner | Art Unit | | |
| | Kyle Purdy | 1611 | | |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet with the c | orrespondence address | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | lely filed the mailing date of this communication. (35 U.S.C. § 133). | | |
| Status | | | | |
| Responsive to communication(s) filed on <u>07 Jac</u> This action is FINAL . 2b) ☐ This action is FINAL . 2b) ☐ This action is in condition for allowed closed in accordance with the practice under Expression in the practice of the | action is non-final. nce except for formal matters, pro | | | |
| Disposition of Claims | | | | |
| 4) ☐ Claim(s) 44 and 53 is/are pending in the application Papers 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 44 and 53 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o | wn from consideration. or election requirement. or. | | | |
| 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex | drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj | e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d). | | |
| Priority under 35 U.S.C. § 119 | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3 pages (01/07/2010 and 02/08/2010). | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ite | | |

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DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of t/e previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/07/2010 has been entered.

Status of Application

- 2. The Examiner acknowledges receipt of the amendments filed on 01/07/2010 wherein claims 44and 53 have been amended.
- 3. Claims 44 and 53 are presented for examination on the merits. The following rejections are made.

Response to Applicants' Arguments

4. Applicants arguments filed 01/07/2010 regarding the rejection of claims 11 and 53 made by the Examiner under 35 USC 103(a) over Ohuchida et al. (US 7176240) in view of Sramek et al. (Opin Invest Drugs, 2002) have been fully considered and they are found persuasive. This rejection is withdrawn.

New Rejections Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. Claims 44 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haas et al. (Annals of Clinical Psychiatry, 1997, 9(3), 145-147) in view of Petersen et al. (Neurology, 2001, 56, 1133-1142).
- 8. Haas is directed to a treatment for demented elderly aggressive patients with divalproex. Divalproex is a 1:1 mixture of sodium valproate (sodium 2-propylpentanoate, i.e. Applicants elected species) and valproic acid (Applicants elected species in nonionic form). It's taught that divalproex had utility in the 'treatment of behavioral dysontrol in cognitively impaired individuals.' (see page 146, right column). Moreover, it's taught that divalproex should be considered as a pharmacotherapy for aggressivity in 'cognitively impaired, elderly people' (see abstract).
 - 9. Haas fails to teach specifically treating Mild Cognitive Impairment (MCI).
- 10. Petersen teaches that dementia is often preceded by MCI. It's taught that MCI refers to the clinical state of an individual who has impaired memory but is otherwise functions well and does not meet the clinical criteria for dementia.
- 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Haas and Petersen with a reasonable expectation

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for success in arriving at a method of treating MCI by administering a composition comprising valproate. While Haas does not teach treating MCI directly, any ordinary person would have been capable of arriving at such a treatment, see:

Dementia \rightarrow MCI;

Val → treats Dementia; therefore

Val → treats MCI.

12. That is, since it was known that valproate treated the symptom of full-blown cognitive impairment seen in dementia, one would expect that because dementia follows MCI, and would be expected to have the same etiology, valproate would be expected to exert some therapeutic benefit (e.g. improvement of cognitive function) on a subject with MCI, as observed for the subject with full-blown cognitive impairment. It's the position of the Examiner that if a compound known to treat a certain medical condition, that compound would then be expected to treat the conditions leading up to that certain condition. Therefore, the invention as a whole is *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in absence of evidence to the contrary.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle A. Purdy whose telephone number is 571-270-3504. The examiner can normally be reached from 9AM to 5PM.

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14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Sharmila Landau, can be reached on 571-272-0614. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kyle Purdy/

Examiner, Art Unit 1611

May 20, 2010

/Sharmila Gollamudi Landau/

Supervisory Patent Examiner, Art Unit 1611